

Assignment Title: Creative
Audio & Music Tech

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Name: Nathan McCubbin
N0708166

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Introduction

This report reflections on the portfolio work. Going over what was done to achieve the goals of each project, the influences and references of each project that guided it towards its goal. While also reflecting on all the steps chosen for each project and discussing what went well and what failed.

1. Critical Reflection

1.1 Creative Technologies Project

The goals of this project was to create the instruments to produce a chilled synthwave song, only use Reaktor 6 for the processing and playing and to build a complex reaktor ensemble. The composition was not made to be complex, but rather to show off the sounds of the instruments. Specially the lead synth as it has the most sonic capabilities.

The first part of the synthwave track was the drum sampler, which was originally planned to also be a sequencer. And to make use of the dual sync delay and saturator reaktor modules. The drum sampler was simple to build, and the video provided by Reaktortips was presented in a way that anyone could have made it. It works well and gives some creative freedom with the ADSR function.

But like stated in the Reaktortips video, the drum sampler is simple. It is nothing special, this is especially evident as my version of the drum sampler does not have the dual sync delay module. Which was used in the video, this is due to the video showing an older version of reaktor. So now my drum sampler is even more basic than the video instructor intended. Thus making it lack any creative stimulation as only having the ADSR is not enough to fulfil the goal of only using reaktor for processing and playing.

To rectify this I attempted to program a sequencer to the sampler so the goal of reaktor playing the drums could be achieved, but unfortunately I was unable to figure out how to go about programming the sequencer module with the sampler, I attempted to find guides online but none of them discussed what I wanted. A video was found on how to build a sequencer, but it was again in an older version of reaktor which made the video redundant.

So, failing the goal of it being played in reaktor, I used an Ableton midi track as a sequencer. By drawing in the notes I wanted to trigger on the drums and then record the drums on an

audio track. I had the same issue with programming a saturator, as I was unable to figure out how to do it and any video about programming a saturator was redundant.

The arpeggiator synth's goal for the song was to be the rhythm section, it was the first thing I created, thus it helped guide the other instrument's goals and usability. This was made to fulfil the synthwave goal of the song, as synthwave songs are known for their arpeggiator synth lines and melodies.

A few examples:

1. In the Face of Evil – Magic sword. (Magic Sword, 2015)
2. Miami – Jasper Byrne. (Jasper Byrne, 2012)
3. Thrasher – Gunship. (Gunship, 2018)

This sound for the synth is influenced by Dance with the Dead – Signal's opening synth lead line, as it is not overtly aggressive and leans more towards a charm, sinewave sound. Which is what I wanted to achieve the goal of making this song chilled. But the extra addiction to the arpeggiator synth is the amount of reverb used.

The arpeggiator synth achieves the goals of the project, and also is a success in terms of only being processed and played by Reaktor and only recorded in Ableton. But it was only built to fulfil the bare minimum, this is evident as it was built in reaktor blocks and thus is not impressive and does not have anything special about it.

The bass synth sequencer was designed to fulfil the goals of the synthwave track. Like the arpeggiator synth, the bass is influenced by the use of the 8/16th note bass lines that are common practice in synthwave music.

A few examples:

1. In the Face of Evil – Magic sword. (Magic Sword, 2015)
2. King of the Streets – Lazerhawk. (Lazerhawk, 2013)
3. A Real Hero – Electric Youth. (Electric Youth, 2014)

An interesting development with this bass blocks build is how I went through a number of Oscillator. as originally I used the Boutique Multiwave OSC as this is based on a classic synth that is known for its bass sound, but I felt like the bass sound was not what I needed, as it seemed too raw and too dense. (Native Instruments, 2017)

I decided to use the Duality Osc, as it is known for its ability to produce growling, cracking and sub bass tones. Which is what I wanted as I wanted a sub bass to fill the song's low frequency bandwidth. And use the modulated growl to help emphasize the bass tone. (Native Instruments, 2017)

The bass sound produced sounds great, it works well with the other instruments, speciality the drums. It also the fulfils the goals of the project, by the use of the sequencer and playing 8th notes. But the bass set up is not interesting and lacks originality as it was a basic build in blocks.

The main reason for the synth lead being created was to fulfil the goal of creating a complex reaktor ensemble, this was done by building multiple modules that were used in conjunction with each other to allow the synth to make a multitude of creative options. This was also to fulfil the goal for the synthwave track, it only has three oscillators to keep the synthesiser from becoming too complicated. (Samplemagic, 2015)

The lead synth is not necessarily based off a particular classic synth, but rather the synthwave music I listen to and like. Victory by Kalax has a very nice synth lead sound, its softs but not simply a sinewave. And it has a basic tone to it, which is evident in a lot of synthwave music. (Samplemagic, 2015)

The lead synth was a success in terms of building, there were barely any issues. Which in turn, leads to it being able to achieve its goals for the project. It also sounds great and gives plenty of options to make interesting sounds, even some percussive sounds with the noise shape. I felt like the synth needed a glide, as I find glides to be interesting musical tool. A great example of when a glide is being used perfectly is in the song Victory by Kalax. I wanted to also give my synth more versatility.

Unfortunately, the distortion and delay do not work as I hoped. The distortion does work, but it seems to bring the overall level of the synth down and it does not sound too great.

The delay macro does not work correctly as when the delay frequency knob is tweaked, it delays the signal coming to the output. Instead of being the traditional input signal, then another input signal but slightly delayed. It removes the initial signal.

I originally wanted to add a reverb macro into the synth but was unable to figure it out and I could not find anything to guide me. So instead I used a rounds reverb block.

1.2 Creative Composition

The plan for the composition was to make a black comedy synthwave song with rap style vocals. This was decided on as synthwave is an interesting genre and is new to the team in terms of composing, the idea for black comedy was to have fun with the subject matter and rap vocals was chosen as combining genres can have interesting results and Michael has a rap persona called Lil Backpack. The team planned that we would come up with ideas in their own time at home, bring them in to sessions and record/tweak them.

The references for the Lil Backpast song are:

1. David Hasselhoff – True Survivor
2. Dance with the Dead – Diabolic
3. Kavinsky – Nightcall
4. Brad Fiedel – Terminator Theme Song.

The elements from True Survivor that are being referenced are the lyrical content, as the lyrics are about fighting, surviving and going to the past. Lil backpast's lyrics are less vague than True Survivor and most synthwave songs, the main goal of the lyrics is to make the listener laugh, so vague lyrics would not work as well. We did not use the idea of fighting in Lil Backpast's lyrics, we mostly focused on traveling through time and getting in funny situations while also trying to sleep with his mum to survive.

The guitar tone and usage of guitar in Diabolic is referenced. As they usually have the synths as their main instruments, but it does have a guitar solo. The guitar solo in Diabolic gave the idea to do the little guitar solo in verse two. But we decided on something more for the background rather than an actual solo as we did not think a solo would fit the song.

Nightcall is referenced for its slow bpm and use of arpeggiators, but we decided we not want an arpeggiator that slow for Lil Backpack. So we made ours an 8th note arpeggiator.

Lastly, the Terminator Theme Song for its synth sounds and mood. The synth sounds are exactly what is sought after in Lil Backpast, as it is a basic synth that is a product of the time. While the mood fits the style Lil Backpast. we had an idea for the mood of the instrumental and vocals to contrast each other. As the instrumental and vocal style for the verses are minor and sound serious. While the lyrics are comedy and lack any seriousness. This is evident especially in the use of adlibs and the chorus. As the adlibs are trying to emphasized the comedy.

The decision to use a real synthesiser was made to fulfil the references and to make the synthwave song more legitimate. The Juno 6 was chosen as it is a product from time as it was released in 1982. And it has rich sound that is also versatile in its option on adjusting the sound. (Roland, 1982) This is evident as the Juno 6 provided all the synth melodies and leads other than the arpeggiator, bass and chorus arpeggiator.

Using the Juno 6 was a good idea, it does makes the track sound more legitimate and it is more fulfilling to use an actual instrument rather than a digital vst. It would have been nice to spend more time with it and maybe even write some form of solo with it, but the team were unexperienced with the analogue synths so setting it up was a hassle and we frequently needed our tutor to help us.

The production sessions was more like a band rehearsal. As instead of writing a song with structure; melodies and riffs were made and then recorded to then be placed in a structure when the session was done.

I was able to come up with an arpeggiator melody using the C Minor 7th chord and G Minor chord. Those chords were chosen as we decided to us the C minor pentatonic scale, as it is nothing complicated and easy to write to and the use of a pentatonic scale was done as it sounds great, it does not create too much tension nor is it too different.

The arpeggiator melody was recorded through the Waldorf Microwave XT, this was used as the sound it gave was fitting for the genre and worked well with the other melodies from the Juno 6. The use of an arpeggiator melody for the song is to ground its self in norms of synthwave, as arpeggiator melodies are common. As mentioned eariler.

A bass guitar was attempted to be used, but it did not fit the style desired for the song. Same goes for the drum sequencer. A different approach was taken as the bass ensemble from my reaktor project was used instead as I knew it was a fitting bass sound and would give us the huge low end we desired. We tweaked it by removing the sequencer and using a note in block instead as we wanted the bass to have different note progressions through the verses and chorus'.

This goes for the drums as well. We went through the drum machine pack provided by our tutor and selected the best pieces. Then wrote the midi tracks so the drums had more variety.

The last thing left to do was to write and record vocals. The writing process consisted of all three of us sitting down in the edit suite and thinking of what the song should be about, we already decided on it being a Lil Backpack track.

So it was a matter of discussing subject matter. The references True Survivor and Terminator Theme influenced our lyrics as we decided on a time travel song, as it is fitting in terms of synthwave and 80s movies. The idea of him needing to sleep with his mum came from the movie Back to the Future. As the film is about Marty making sure he is born by having his parents get together.

When the idea for the song was decided, we went straight in to writing the lyrics and we would all try and think of lines or words that made sense, that were funny and would lead the song to its goal. We adapted this style from Michael, as he prefers to write lyrics in the moment and not dwell on them for too long.

The vocals were originally going to be in the style of spoken word, more like rap music. But we felt like it worked better and made more sense for the verses to be singing rather than rap. It also gave us less to write so we could focus on the lyrics we had already and make them better.

The rap influence mostly translates to the chorus and adlibs used throughout the song. As the chorus was the first thing we wrote and we felt like this still worked after the decision to do more singing, the main thing that influenced us on this chorus was that we thought it was really funny. This is exactly what we wanted.

The adlibs were used to make the verses and chorus' more interesting and more funny, as Michael decided to make them wacky and stupid. Which worked significantly in making the song fun to listen to.

We as team worked well, we bounced good ideas off each other and it was fun to work with them, as the sessions we had together were musically stimulating, as mentioned earlier, it was like a band rehearsal, so it felt more free, and creative because of it.

The goal of the song of being funny would not have been as much of a success if Michael was not apart of the team, as he was the main lyric writer and he did the singing. If it was just me and Alfie the song would not be as funny, and neither of sing so it would have been an instrumental. In fact the idea of making it funny and singing would not have been made without Michael.

Alfie was able to come up with some good melodies, ideas for melodies and patches while in the writing process, and he had the idea of changing the drums and adding something with a bit more weight to it.

However, at most points the role of leader fell to me as I was the only one who listened to synthwave and understood it. I also had to make sure everyone was on track, as Alfie and Michael diverged from the plan of writing stuff at home.

So I had to come up with a lot of the ideas at home, so we did not fall behind. The structuring of the song fell to me and I had to bring in what I made at home so they could give me there opinions or we could tweak stuff there and then.

Them not following the plan did make things simpler but made me think they did not care about this project outside of lesson. This is due to the way we all work, I like to get work done early and reflect on it, while Michael and Alfie tend to leave work late.

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